IN VITRO STUDY OF ANTIBACTERIAL ACTIVITY CHLOROFORM EXTRACT OF SOURSOP LEAF (*Annona muricata* L.) ON *Pseudomonas aeruginosa* GROWTH

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ABSTRACT

The aim of this research was to study antibacterial activity chloroform extract of soursop leaf (*Annona muricata* L.) on bacterial growth inhibition of *Pseudomonas aeruginosa* by diffuse disc method. The result of the inhibition zone was analyzed using Anova (Analysis of Variance) test and followed using Duncan test showed looks outcomes were significantly different ($p < 0.01$). The inhibition number of negative control (K-) was $0,00^{e} \pm 0,00$ and the positive control (K+) was $31,31^{a} \pm 0,57$. The result of concentration 1 (P1) was $14,49^{b} \pm 4,96$; concentration 2 (P2) $8,98^{c} \pm 1,29$; concentration 3 (P3) $5,84^{cd} \pm 1,85$; concentration 4 (P4) $5,56^{cd} \pm 1,58$; concentration 5 (P5) $2,85^{de} \pm 0,28$; concentration 6 (P6) $2,98^{de} \pm 0,53$; concentration 7 (P7) $2,82^{de} \pm 1,59$; concentration 8 (P8) $2,41^{de} \pm 1,10$; concentration 9 (P9) $2,20^{de} \pm 0,34$; concentration 10 (P10) $1,1^{e} \pm 0,19$; and concentration 11 (P11) $0,00^{e} \pm 0,00$. The increase chloroform extract of soursop leaf concentration showed high inhibition diameter of bacterial growth. It showed that chloroform extract of soursop leaf (*Annona muricata* L.) have antibacterial activity to inhibit *Pseudomonas aeruginosa* growth with Minimal Inhibitory Concentration (MIC) 125 ppm.

Keywords: Antibacterial activity, soursop leaves (*Annona muricata* L.), chloroform extract, *Pseudomonas aeruginosa*